

avian species not known for brood parasitic behavior (Bailey 1886, Holcomb 1967, Wiens 1971, Gustafson 1975, Cannell and Harrington 1984, Littlefield 1984, Carter 1987, Sealy 1989). Females may lay in another cavity because they are unable to approach their own cavity at the time of laying, due to the presence of a predator, nest usurpation, or other disturbance. Based on monitoring of nest boxes at Hastings Reservation, 11.2% of 98 Violet-green Swallow nests with at least one egg failed before hatching from 1983 through 2005. This small incidence of nest failure during laying and incubation is only partially attributable to predation, but indicates that infrequent nest predation or disturbance during laying could account for the behavior we observed. Although there are no data on conspecific nest usurpation in Violet-green Swallows, nest usurpation has been well documented in Tree Swallows (*Tachycineta bicolor*) (Leffelaar 1985).

#### ACKNOWLEDGMENTS

We thank Wendy Fair and Caitlin Stern for helpful comments and Cachagua General Store for gastronomic support. This research was funded by NSF grant IBN-009702 to JLD. Edited video footage may be viewed at: [http://www.birds.cornell.edu/birdhouse/nestboxcam/movies\\_home/vgsw\\_in\\_web1](http://www.birds.cornell.edu/birdhouse/nestboxcam/movies_home/vgsw_in_web1) courtesy of Cornell Laboratory of Ornithology's "The Birdhouse Network."

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*The Wilson Journal of Ornithology* 119(1):128–129, 2007

## Western Bluebird Captures a Western Fence Lizard

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**ABSTRACT.**—I observed a male Western Bluebird (*Sialia mexicana*) capture a western fence lizard (*Sceloporus occidentalis*), the first reported incidence of vertebrate-directed raptorial behavior in the Western Bluebird. There are no previously published reports of Western Bluebirds capturing vertebrate prey, although

there is one previous report of a Western Bluebird carrying an unidentified lizard in the manner of a prey item, and a few reports of predation on vertebrates by the congeneric Eastern Bluebird (*Sialia sialis*). *Received 9 January 2006. Accepted 28 June 2006.*

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Western Bluebirds (*Sialia mexicana*) are primarily insectivorous during the breeding season, and rely upon berry crops during winter (Guinan et al. 2000). Individual Eastern Bluebirds (*Sialia sialis*), a congeneric species,

which is also primarily dependent upon insects and small fruits (Gowaty and Plissner 1998), have occasionally been observed capturing vertebrate prey, such as snakes (Flanigan 1971) and shrews (Pinkowski 1974). Beal (1915) reported the bones of lizards and tree frogs in the stomachs of Eastern Bluebirds, as did Bent (1949). Braman and Pogue (2005) found a dead, 8.3-cm-long flat-headed snake (*Tantilla gracilis*) in an Eastern Bluebird nest box, suggesting a past predation event. Of 217 Western Bluebird stomachs examined by Beal (1915), not one contained evidence of vertebrate prey. Herlugson's (1982) analysis of Western Bluebird stomach contents similarly yielded no evidence of vertebrate prey items, and adults were not observed delivering vertebrate prey to nestlings. Gaylord (1995) observed a male Western Bluebird carrying an unidentified lizard in his bill; however, she did not observe the capture or consumption of the lizard. There have been no previous reported observations of Western Bluebirds capturing vertebrate prey.

#### OBSERVATIONS

Western Bluebirds have been color-banded and their breeding biology monitored at Hastings Natural History Reservation, Carmel Valley, California, since 1983 (Dickinson et al. 1996). While censusing a winter group on 11 October 2005, I observed a first-winter male Western Bluebird catch a ~5-cm-long western fence lizard (*Sceloporus occidentalis*; Stebbins 1966) in his bill at 0928 hrs PST. The bluebird was perched on top of a wooden fence post, and the lizard was clinging to the side of the post ~7 cm below the bluebird. The bluebird left his perch, hovering briefly beside the post as he seized the lizard around its middle with his bill. This maneuver was executed quickly, and the lizard did not attempt to flee, although it arched its body after it was already held in the bluebird's bill. Returning to his perch on the same fence post, the bluebird twice beat the lizard's head against the post. This appeared to be an attempt to stun or kill the lizard. At 0930 hrs, the bluebird flew with the now immobile lizard still in his bill onto the property of a private ranch. I was not able to follow and ascertain whether the bluebird consumed the lizard because this ranch is closed to researchers.

#### DISCUSSION

Western Bluebirds commonly beat invertebrate prey against a perch before consumption, and both Flanigan (1971) and Pinkowski (1974) reported Eastern Bluebirds beating vertebrate prey items against perches before consuming them. The observed bluebird male was clearly treating the lizard as a prey item.

That vertebrate-directed raptorial behavior by Western Bluebirds has not been reported previously, despite intensive observation of Western Bluebird behavior, suggests that, similar to Eastern Bluebirds, Western Bluebirds rarely capture vertebrate prey. To my knowledge, capture of vertebrate prey by the third member of the genus *Sialia* (i.e., Mountain Bluebird, *Sialia currucoides*) has not been reported.

#### ACKNOWLEDGMENTS

I thank J. L. Dickinson, D. L. Kleiber, W. M. Fair, and three anonymous reviewers for providing valuable comments on this manuscript.

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